



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,043	10/14/2004	Geir Monsen Vavik	CU-3831 RJS	3141
26530 7590 01/29/2010				
LADAS & PARRY LLP				
224 SOUTH MICHIGAN AVENUE				
SUITE 1600				
CHICAGO, IL 60604				
EXAMINER				
GREGORY, BERNARR E				
ART UNIT		PAPER NUMBER		
3662				
MAIL DATE		DELIVERY MODE		
01/20/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,043

Applicant(s)

VAVIK, GEIR MONSEN

Examiner

Bernarr E. Gregory

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 171-226 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 171-226 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The Specification is hereby objected to under 37 CFR 1.71 in that the mentions of claims are extraneous matter that tends to obscure the disclosure of the invention. For example, see lines 1-5 on page 1 and lines 1-5 on page 7 of the Specification. Correction of all such mentions of claims in the Specification is hereby required.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 171-226 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 4 of independent claim 171, it is unclear in context what is meant by a "signal conditioner." Please see 37 CFR 1.75(d)(1).

On lines 5-6 of independent claim 171, it is unclear in context what is meant by the adjective "necessary" as it modifies "carrier frequency converters." Which carrier frequency converters would be unnecessary?

On line 8 of independent claim 171, it is unclear in context what is meant by the phrase, "enabling utilization of the signal medium."

On line 2 of dependent claim 177, it is unclear in context what is meant by "a quenched regenerative signal processing gain." This reads in context as if it is a gain in the abstraction apart from any structure to apply this gain, which would make the claim unclear as to what structure performs the application of the gain. Similarly, on line 2 of dependent claim 178, it is unclear in context what is meant

by "quenched regenerative signal processing gain." And, also similarly, on line 2 of dependent claim 179, it is unclear in context what is meant by "quenched signal processing gain."

On lines 1-2 of dependent claim 182, the phrase, "facilitation of predictable connectivity" is indefinite and unclear in context as to what action is described.

Overall, dependent claims 182, 189, 192, 196-199, 202-205, 217, and 221 are too unclear to be meaningfully interpreted.

On lines 2-3 of dependent claim 189, the phrase, "to improve the system performance through a distributed presence of active and passive compensation in said apparatus" is unclear in context.

On lines 2-3 of dependent claim 192, it is unclear in context what is meant by "PHY or PLC Power Line Communication platforms," the capitalizations tending to imply that something specific is intended.

On line 2 of dependent claim 196, it is unclear in context what is meant by a "voltage distribution street light."

On lines 2-3 of dependent claim 197, it is unclear in context what is meant by the phrase, "to facilitate the conditioning of the grid towards performing like a transmission line based system."

On lines 2-3 of dependent claim 198, it is unclear in context what is meant by the phrase, "inherent attenuation in junctions to form multi-ports with mutual isolation to aid stability and noise conditions with superregenerative as superheterodyne repeaters."

On line 1 of dependent claim 199, the claim is unclear in context in that it appears that the word "further" is missing immediately before the word "comprising."

On lines 2-3 of dependent claim 205, the phrase, "fibre coax HFC arrangements to obtain accessing of the system at shorter intervals and binding together the system" is unclear in context.

On line 2 of dependent claim 205, the use of the comparative adjective "shorter" is unclear in context in that it is not clear what the basis of comparison is.

On line 2 of dependent claim 213, the use of the word "can" makes the claim indefinite and unclear in that it causes the verb "facilitate" to express potential action, rather than expressing clear and definite action.

Dependent claims 172-226 are unclear at least in that they depend from unclear independent claim 171.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 171-176, 183-185, 188, 208, 214-216, 218, 220, 222, and 225-226 are rejected under 35 U.S.C. 102(b) as being anticipated by Nazarathy et al ('727).

Taking independent claim 171 first, Nazarathy et al ('727) plainly shows communication through at least one "signal medium" by means of electromagnetic signals. As a cable television system with a two-way hybrid network, Nazarathy et al ('727) is "systematic and distributed" (line 4). The recited "transponders" of claim 171 are met at least by the transponders mentioned, for example, at column 16, lines 43-59 of Nazarathy et al ('727). The claim 171 "repeaters" are necessary in Nazarathy et al ('727) to keep signal level at adequate levels. The claim 171 "coupler arrangements" would be inherent in Nazarathy et al ('727) in that there must be some sort of coupling between components or stages in a system such as in Nazarathy et al ('727). Of course, "necessary carrier frequency converters" would be present in Nazarathy et al ('727) at least to go between links operating at different carrier frequencies. The claim 171 "output level controls" (line 6) would be inherent in the Nazarathy et al ('727) transponders to keep output between the lower threshold necessary for signal detection and the upper limit of signal level that the components can tolerate. The claim 171 D/A and A/D are met by Nazarathy et al ('727) in that Nazarathy et al ('727) plainly has digital portions (e.g., see the digital fiber node in Figure 7) and has analogue portions (e.g., the output to the analogue TV receivers). In that all of the parts recited in independent claim 171 are plainly shown in Nazarathy et al ('727), claim 171 is anticipated by Nazarathy et al ('727).

With respect to the "cable modem" in dependent claim 172, please see item 18 in Figure 7 of Nazarathy et al ('727).

As for the further limitations of dependent claim 173, plainly a system such as that in Nazarathy et al ('727) would control "signal dynamic balance."

As for the further limitations of dependent claim 174, various powered nodes in Nazarathy et al ('727) could be called "interfaces" as claimed.

The further limitations of dependent claim 175 would read on repeaters that are present in any extended optical link, as in Nazarathy et al ('727).

The further limitations of dependent claims 176, 183-185, 188, 208, 214-216, 218, 220, 222, and 225-226 are plainly met by 176, 183-185, 188, 208, 214-216, 218, 220, 222, and 225-226.

6. Claims 177-181, 186, 187, 190, 191, 103-195, 200, 201, 206, 207, 209-213, 219, 223, and 224 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. Claims 182, 189, 192, 196-199, 202-205, 217, and 221 are so unclear that it is not possible to indicate potentially allowable subject matter for those claims at this time.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examiner-cited prior art that has not been applied above is of general interest for showing a CATV system that is similar to Applicant's invention (Handelman ('773)) and for showing transmission of television signals via power lines (Patel et al ('614)).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernarr E. Gregory whose telephone number is (571) 272-6972. The examiner can normally be reached on weekdays from 6:30 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza, can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 3662

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bernarr E. Gregory/
Primary Examiner, Art Unit 3662